Recovery Plan Action Status

Plan Name: Peebles Navajo Cactus

Plan Status: Final Plan Date: 30-Mar-84 Lead Agency: USFWS

Lead Office: Arizona Ecological Services Field Office 242-0210)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	1	111, 121	Law enforcement	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Law Enforcement Division, Bureau Land Management , USFWS Regional Office 2, Arizona Commission of Agriculture and Horticulture	Other: Law Enforcement	Internal Field Assistance	Law enorcement provided in the field by BLM and by FWS on request.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	1	112	ORV closure and signing	Partially Complete	Prior to FY 1995	Prior to FY 1995	Bureau Land Management	Management: Land Use	Internal Field Assistance	BLM closed and fenced densely populated areas that are used for monitoring status. plants outside of these fenced monitoring areas are not protected from potential harm from OHV activities.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	1	112, 114	ORV and livestock fencing	Partially Complete	Prior to FY 1995		Bureau Land Management	Management: Land Use	Internal Field Assistance	BLM closed and fenced densely populated areas that are used for monitoring status. plants outside of these fenced monitoring areas are not protected from potential harm from OHV or grazing activities. This situation exists in plot S14 where cattle have access.

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Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	1	113	Mineral entry withdrawal	Planned	FY 2006	FY 2008	Bureau Land Management	Management: Land Use	Internal Administrative	Gravel operations can be declined if necessary. Mining is not specifically precluded from ACECs. The preclusion of mining from ACECs must be specifically requested. Larry Thrasher of the BLM is the contact for mineral-related issues.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	1	114	Grazing management	Ongoing Current	Prior to FY 1995		Bureau Land Management	Management: Land Use	Internal Field Assistance	The allotment with Peebles present is called the Apache Butte Allotment. The allotment is divided by Interstate 40; the portion of the allotment north of I-40 is occupied by Peebles Navajo cactus. Consultation is underway for this allotment as of October 2007. The BLM owns 37.1% of the alotmentnorth of I-40; the remainder is 48.4 private and 14.5 State-owned.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	2	115	Restrict access on powerline road	Not Started			Bureau Land Management	Management: Land Use	Internal Field Assistance	Due to staff changes over the years, no one knows where this alleged "powerline"road is or what management can be applied or what authority for said management exists.

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Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	2	116	ACEC designation	Ongoing Current	Prior to FY 1995	Prior to FY 1995	Bureau Land Management	Management: General	Internal Administrative	The ACEC is called the Tanner Wash ACEC. In the most-recent Resource Management Plan, BLM proposes to designate all known habitat for the Peebles Navajo cactus as the Tanner Wash ACEC.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	3	117	Develop management agreement (BLM lands)	Obsolete			Bureau Land Management , U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2	Acquisition: Management Agreement	Internal Administrative	The recovery plan serves as the management agreement between the BLM and FWS.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	3	118	Develop HMP on BLM lands	Complete	Prior to FY 1995	Prior to FY 1995	Bureau Land Management , U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2	Management: Planning	Internal Administrative	The Habitat Management Plan area consists of 420 acres which accounted for all known occupied acres as of 1985. The HMP area is located in G&SRM, Navajo County, Arizona, Township 18 North, Range 19 East, Section 24. Since then additional populations were found in 1996 and again in 2004 in Section 14. The 1996 populations added approximately 10 acres. The 2004 populations have not yet been surveyed but are scattered across an area of approximately 160 acres.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	1	119	Monitor populations and habitat	Ongoing Current	Prior to FY 1995		Bureau Land Management , U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2	Research: Population Surveys	Internal Technical Assistance	Annual monitoring of core population centers occurred from 1985-2004 by Barb and Art Phillips.

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Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	2	122, 123	Pursue habitat protection with State and private landowners	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2	Acquisition: Easement	Internal Administrative	Approximately 70% of the known occupied habitat for Peebles Navajo cactus occur on State or private lands. The Nature Conservancy has approached the private land owners about conservation with some interst expressed. Concerns about TNC staff retention and the fact that the landowners family not being in consensus are potential problems.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	3	132	Develop study of extent of use in commercial and private collection	Ongoing Current	FY 2006			Research: Other Information	Internal Technical Assistance	An expert on the subject of Pediocactus propagation has perfected the production of this species in captivity which has incidentally reduced demand for the species from wild populations. The perceived threat of illegal collection does not appear to be as significant as originally believed.

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Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	3	21	Study ecological requirements of species	Ongoing Current	Prior to FY 1995		Bureau Land Management , U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2	Research: Habitat Requirements	Contract	Dr. Phillips has investigated soil requirements, precipitation response and effects from herbivory. Mary Buttterwick investigated pollination of the species. Jeanette Milne investigated the role of mycrorhizae. Several habitat components have been analyzed over the years but data are too dispersed among agencies and researchers and need to be centralized.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	3	22	Study population biology	Not Started			Bureau Land Management , U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2	Work type not yet selected	Labor type not yet selected	Population viability analysis should be performed and existing research data should be made more available.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	3	232	Develop habitat management plan for Shinarump ecosystem	Discontinued	FY 2006		Bureau Land Management , U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2, Arizona Commission of Agriculture and Horticulture	Management: Planning	Internal Administrative	A habitat management plan already exists for the Peebles and agency personnel belive this action item to be duplicative in nature.

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Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	3	24	Inventory for new locations and populations	Ongoing Current	FY 2000 - FY 2004		Bureau Land Management , U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2	Research: Other Information	Graduate Student	Johnathan Donald, NAU graduate student has been diligently surveying for additional populations and has found several small populations in two additional areas nearby the previously known populations in 2004. These plants occur in low density within a 160 acre area. Populations discovered in 1996 account for 10 acres of recently discovered occupied habitat.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	3	3	Develop public awareness	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2	Other: Information and Education	Internal Field Assistance	Education and outreach of the stakeholders and general members of the public has occurred but ongoing commitments to continuing outreach is necessary.
Peebles Navajo cactus (Pediocactus peeblesianus var. peeblesianus)	3	4	Develop propagation methods	Complete	FY 1995 - FY 1999	FY 2005	U.S. Fish and Wildlife Service, Office of Endangered Species, USFWS Regional Office 2	Management: Propagation	Contract	Captive propagation techniques have been developed for this species by Steve Brack at the Mesa Garden Nursury in Belen, New Mexico.